RECEIVED
CENTRAL FAX CENTER
JUN 0 6 2007

Remarks/Arguments

Claim Rejections – 35 USC 102

Claims 1-5 stand rejected as being anticipated by Frazier (U.S. Pat. No. 5,081,523).

The invention as claimed in claim 1 relates to a method of processing images for the correction of distortions in a CRT and, more particularly, to the distortions created by the instability of the high voltage circuit of the CRT. These distortions take the form of a global zoom or a x-wise zoom as explained in the preamble (background of the invention) of the present patent application.

The inventive method recited in claim 1 comprises the steps of

characterizing the distortions created by the CRT, and

for each image of the sequence to be displayed, calculating the distortions affecting it and generating a pre-corrected image comprising the inverse distortions.

In other words, the solution proposed by the invention is to modify the video content of the image to be displayed (input image) in order that, when displayed by the CRT, the displayed image has no distortions (no zoom). The modification of the video content consists of introducing inverse distortions to the image before providing it to the beam generator.

Frazier does not disclose the modification of the video content of the image to be displayed (input image) before providing it to the beam generator. The display image correction system is described at column 5, line 27 to column 7, line 4. To correct display image distortions, Frazier suggests modifying the control of the beam intensity or beam deflection of the CRT. Position and intensity correction signals are

generated and used to modify the display operation. These signals are used by the image beam generator to display an image without distortions.

In sum, the solution suggested in Frazier is to modify the control of the beam. It does not disclose generating a pre-corrected image (comprising inverse distortions) before providing it to the beam generator.

In light of the above assertion that Fazier does not disclose modifying the video content, which is a key limitation of Applicants' claim 1, Applicants request reconsideration of the rejection to claim 1.

Claims 2 and 3

The inventive method recited in claims 2 and 3 comprises the steps of

characterizing the distortions created by the CRT, and

for each image of the sequence to be displayed, calculating the distortions affecting it and generating a pre-corrected image comprising the inverse distortions,

determining the global zoom created by the cathode ray tube as a function of the luminous intensity of that of the previous images; and

calculating the global zoom affecting the current image and generating a precorrected image by applying the inverse of the global zoom to the current image.

Claim 3 further includes subject matter regarding local zoom correction.

In other words, the solution proposed by the invention in claims 2 and 3 is to modify the video content of the image to be displayed (input image) in order that, when displayed by the CRT, the displayed image has no distortions (no global zoom). The modification of the video content consists in introducing inverse distortions to the

image before providing it to the beam generator. Claims 2 and 3 further requires determining global zoom, calculating the global zoom and applying an inverse.

In contrast to Applicants' claims 2 and 3, Frazier does not disclose the modification of the video content of the image to be displayed (input image) before providing it to the beam generator. Frazier, especially, does not perform determining zoom global, calculating global zoom and applying an inverse to modify the video. The display image correction system in Frazier is described at column 5, line 27 to column 7, line 4 and shown in Fig. 1. To correct display image distortions, Frazier suggests modifying the control of the beam intensity or beam deflection of the CRT. Position and intensity correction signals are generated and used to modify the display operation. These signals are used by the image beam generator to display an image without distortions. This does not involve modification of the video. Rather, the video in Frazier feeds directly into the beam intensity (17) and position controls (18) of the beam generator (14) as shown in Fig. 1.

Further, Applicants point out that global zoom which refers to dilation of the whole image is not addressed Frazier, in contrast to Applicants' claims 2 and 3. Rather, Frazier, when suggesting positional corrections, constantly asserts repositioning of beams (RGB) within the pixel relative to the constituent RGB color phosphor (See Abstract, col. 5, lines 19-25, col. 7, 46-53, col. 8, lines 45-50, Figs. 3-4), and further refers to position errors in terms of color output errors (which is a result of beams not correctly landing on a trio of phosphor for a particular pixel).

As such, Applicant asserts that Frazier does not consider correction of global zoom, which is subject matter to be corrected in the teaching of Applicants' claim 2-3. But rather when suggesting position errors in detail, Frazier refers to local repositioning

of beam and not global positioning, which is significantly distinct from the global zoom phenomenon that Applicant addresses in claims 2 and 3.

Further, regarding claim 3, Frazier does not consider the combination of correcting global and local zoom in video.

In sum, the solution suggested in Frazier is to modify the control of the beam. It does not disclose generating a pre-corrected image (comprising inverse distortions) before providing it to the beam generator and does not teach the correction of global zoom.

In light of the above assertions, Applicants request reconsideration of the rejection to claims 2 and 3.

Claim 4

The inventive method recited in claim 4 comprises the steps of

characterizing the distortions created by the CRT, and

for each image of the sequence to be displayed, calculating the distortions affecting it and generating a pre-corrected image comprising the inverse distortions,

characterizing and calculating local zoom affecting the current image and generating a precorrected image by applying the inverse of local zoom to the current image.

In other words, the solution proposed by the invention in claim 4 is to modify the video content of the image to be displayed (input image) in order that, when displayed by the CRT, the displayed image has no distortions, wherein local zoom corrected. The modification of the video content consists in introducing inverse distortions including the inverse of local zoom to the image before providing it to the beam generator.

Frazier does not disclose the modification of the video content of the image to be displayed (input image) before providing it to the beam generator in combination with characterizing and calculating local zoom affecting each line of current image, which is in sharp contrast to Applicants' claim 4.

In light of the above assertions, Applicants request reconsideration of the rejection to claims 4.

Claim 5

The inventive method recited in claim 5 comprises the steps of

characterizing the distortions created by the CRT, and

for each image of the sequence to be displayed, calculating the distortions affecting it and generating a pre-corrected image comprising the inverse distortions,

calculating the distortions affecting the current image from measurements of anode voltages necessary for the display of this image and generating a precorrected image comprising the inverse distortions.

The solution proposed by the invention in claim 5 is to modify the video content of the image to be displayed (input image) in order that, when displayed by the CRT, the displayed image has no distortions, wherein the distortions affecting the current image are calculated from measurements of anode voltages necessary for the display of this image and generating a precorrected image comprising the inverse distortions.

Frazier does not disclose the modification of the video content of the image to be displayed (input image) before providing it to the beam generator in combination with calculating of distortions from measuring anode voltages. Further, Frazier is silent as to measuring anode voltages, which is a limitation is Applicants' claim 5.

In light of the above assertions, Applicants request reconsideration of the rejection to claim 5.

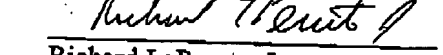
Conclusion:

In response to the office action, Applicants have advanced clear distinctions of the original claims with respect to the cited reference; consequently, Applicants assert that the cited art does not anticipate the pending claims. As such, Applicants respectfully request reconsideration.

If the Examiner has any questions or comments that would facilitate the disposition or resolution of the issues, the undersigned can be contacted at 717 295 6207.

Respectfully submitted,

Didier Doyen et al., Applicants



Richard LaPeruta, Jr.
Registration No. 51,252
Attorney for Applicant
Phone: 717-295-6207
Facsimile: 609-734-6888

Patent Operation
Thomson Licensing Inc.
P.O. Box 5312
Princeton, NJ 08543-5312

June 6, 2007